

By RESS & Courier

February 28, 2017

Ms. Kirsten Walli
Board Secretary
Ontario Energy Board
Suite 2700, 2300 Yonge Street
Toronto, Ontario
M4P 1E4

Dear Ms. Walli:

**Re: Union Gas Limited
Bay of Quinte Replacement Project
Board File # EB-2014-0350**

Pursuant to Condition 3.3 of the Board's Conditions of Approval, attached please find Union's Final Monitoring Report for the above-noted project.

Sincerely,

[original signed by]

Shelley Bechard
Administrative Analyst, Regulatory Projects
Encl.

cc: Zora Crnojacki
Nancy Marconi
Regulatory Library

BAY OF QUINTE REPLACEMENT PIPELINE PROJECT

FINAL MONITORING REPORT

Prepared by: Union Gas Limited
Environmental Planning
February 2017

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1.0 INTRODUCTION

This Final Monitoring Report is provided in compliance with the Ontario Energy Board (“Board”) Order EB-2014-0350 granting Union Gas Limited (“Union”) “Leave to Construct” approximately 1.3 kilometres of Nominal Pipe Size (NPS) 8 inch diameter steel natural gas Picton Lateral pipeline in Tyendinaga Township in the County of Hastings and Sophiasburg Township in Prince Edward County.

Previously an existing NPS 6 inch pipeline was attached to the bridge structure, however as a result of scheduled upgrading of the Skyway Bridge which spans the Bay of Quinte and an order from the Ministry of Transportation, the pipeline could no longer be remain on the bridge. A map of the pipeline route is included in Appendix A.

The requirements for and details of this report are outlined in the specific conditions issued by the Board in its Order dated March 19, 2015 as listed below. The Conditions of Approval can be found in Appendix B.

Accordingly, the purpose of this Final Monitoring Report is to fulfill these conditions.

1.0 Condition 1.1

Union Gas Limited (“Union”) shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2014-0350.

Condition 1.3

Union Gas shall implement all the recommendations contained in the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee (“OPCC”).

Condition 1.4

Union Gas shall advise the OEB's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the OEB or its designated representative. In the event of an emergency, the OEB shall be informed immediately after the fact.

2.0 Condition 2.4

Union Gas shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the OEB's Order.

3.0 Condition 3.1

Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the OEB. The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.

Condition 3.3

The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of any mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4.0 Condition 4.1

Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, and shall provide an affidavit that all such approvals, permits, licences, and certificates have been obtained.

2.0 BACKGROUND

Union was granted approval to construct the Bay of Quinte Replacement Pipeline Project on March 19, 2015. Construction was initiated on August 8, 2015 with the pipeline placed into service on December 4, 2015 and cleanup for the year completed on December 17, 2015. Union replaced the existing NPS 6 inch pipeline which will be removed from the bridge in 2016 and installed an NPS 8 inch pipeline under the Bay of Quinte using the horizontal directional drill method. Construction progressed south of the bay from a tie-in point to Union's Picton Lateral NPS 6 inch pipeline in a northerly direction to a tie-in point to Unions NPS 6 inch pipeline north of the bay, with the following order of operations: tree removal, topsoil removal, stringing, welding, joint coating, trenching, directional drilling, lowering-in, tie-ins, backfilling, testing and clean-up.

Union returned to the right-of-way in spring 2016 to complete the following activities: repair any subsidence on the right-of-way, ensure there is adequate stability and re-vegetation, perform a general overview of the right-of-way post construction water well testing and complete any additional clean-up that may be required.

3.0 POTENTIAL IMPACTS AND MITIGATION

3.1 Condition 1.1

Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and evidence filed in EB-2014-0350 except as modified by this Order and these Conditions of Approval.

Union has complied with all conditions imposed by the Board during construction of the pipeline and has restored the land according to the evidence in support of its application.

3.2 Condition 1.3

Union Gas shall implement all the recommendations of the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee (“OPCC”) review.

Union has implemented all recommendations and mitigation measures outlined in the Environmental Study Report (ER) along with all directives identified by the OPCC.

3.3 Condition 1.4

Union Gas shall advise the OEB’s designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the OEB or its designated representative. In the event of an emergency, the OEB shall be informed immediately after the fact.

There was one change pertaining to this project:

In Union’s pre-filed evidence Union committed to removing the existing pipeline which was attached to the Skyway Bridge after the new pipeline had been directionally drilled and commissioned under the Bay of Quinte. Due to construction delays the pipe was not removed in 2015. Ministry of Transportation Ontario (“MTO”) has given Union a new move order which requires the abandoned pipeline to be removed by the end of 2017. A copy of the change request can be found at Appendix D.

3.4 Condition 2.4

Union Gas shall furnish the Board's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the OEB's Order.

This Final Monitoring Report as well as the previously filed Interim Monitoring Report shall confirm that the work has been performed according to the Board's Order.

3.5 Condition 3.1

Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the OEB. The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.

3.5.1 Report Circulation

Four (4) copies of this Interim Monitoring Report are provided to the Board.

3.5.2 Landowner Concerns

Union's complaint tracking system, which identifies the current status of landowner complaints received as a result of pipeline construction, was/is in effect. A complaint is identified as a concern raised by a landowner, which has not been resolved to the landowner's satisfaction within three (3) working days. There were no complaints entered into the complaint tracking system. During

construction, issues that were minor in nature were raised to Union and their contractor. These were dealt with by Union or the Contractor in an expeditious manner.

3.5.3 Water Well Complaint

Prior to the development of the directional drill plan, Union completed geotechnical surveys in October 2014 to investigate terrain and subsurface conditions to aid in the detailed design of the directional drill crossing.

On May 21, 2015, Union received a complaint from a resident of a well interference. Union Gas employed the services Stantec Consulting Ltd. (Stantec) to investigate the complaint. Stantec contacted the resident on May 22, 2015 to discuss the well interference and schedule a site visit for May 29, 2015 at which time water samples were taken.

Stantec concluded that based on the drilling details, the immediate abandonment of the geotechnical borehole with the use of cement/bentonite and the historical water quality within the area, well interference due to Union Gas activity was not interpreted. A letter outlining the investigation process and conclusions was sent to the landowner on July 3, 2015. No additional complaints have been received.

3.6 Condition 3.3

The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of any mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

The entire right of way and in particular areas in close proximity to the watercourse were checked for stability, subsidence and vegetation re-establishment in spring of 2016 and found to be successfully rehabilitating and protected with

proper sediment control devices to aid in the rehabilitation process. No deficiencies in compliance were identified.

3.6.1 Monitoring Programs

The previously filed Interim Monitoring Report provides a description of the successfully completed monitoring programs (Archaeology, Watercourses, Tree Replacement) undertaken prior to, during and following construction to monitor the effects of construction.

3.6.1.1 Water Well Monitoring

Further to the private well monitoring outlined in the previously filed Interim Monitoring Report performed prior to and during construction, Union employed the services of Stantec Consulting Ltd. to continue monitoring post-construction at the property where the seepage event occurred (RW12). For the two (2) remaining sampling rounds, one was completed in September 2016 and the final sampling event completed in November 2016 in coordination with the resident.

Based on the water quality and groundwater level results there was no indication of a change within nearby residential wells following the Union Gas activity. The results were provided to the Mohawks of the Bay of Quinte and the resident following each testing event. Stantec recommended that no other monitoring is recommended as part of the Union Gas pipeline program and the program is considered complete.

4.0 Condition 4.1

Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, and shall provide an affidavit that all such approvals, permits, licences, and certificates have been obtained.

Union obtained all approval, permits, licences, and certificates required to construct operate and maintain the Sarnia Expansion Pipeline Project. An affidavit acknowledging the acquisition of the approval, permits, licences, and certificates can be found in Appendix C.

5.0 SUMMARY

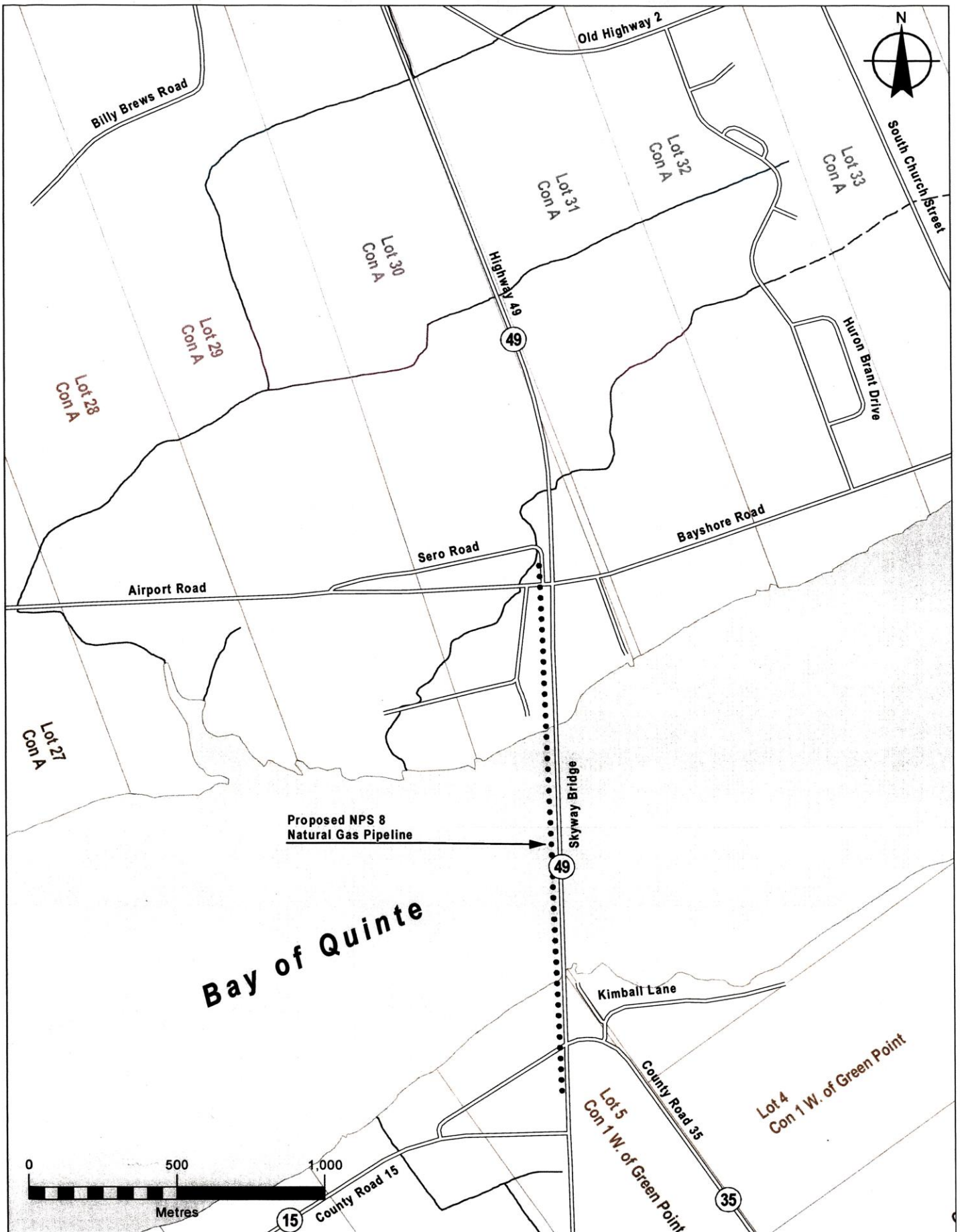
This Final Monitoring Report has been prepared as per conditions in the Board Order EB-2014-0350. The report provides an outline of Unions' compliance with the commitments of its witnesses, the measures implemented during construction to minimize disturbance to the environment and a description of Unions' monitoring programs. It is anticipated that these measures will effectively eliminate any long-term impacts to the environment.

Appendix A

Location Map

GENERAL LOCATION MAP BAY OF QUINTE REPLACEMENT PIPELINE PROJECT





Appendix B

Conditions of Approval

EB-2014-0350

Union Gas Limited Leave to Construct Application

Conditions of Approval

1 General Requirements

- 1.1 Union Gas Limited ("Union") shall construct the facilities and restore the land in accordance with its application and the evidence filed in EB-2014-0350.
- 1.2 Unless otherwise ordered by the OEB, authorization for Leave to Construct shall terminate December 31, 2015, unless construction has commenced prior to that date.
- 1.3 Union shall implement all the recommendations contained in the Environmental Report filed in the pre-filed evidence, and all the recommendations and directives identified by the Ontario Pipeline Coordinating Committee ("OPCC").
- 1.4 Union shall advise the OEB's designated representative of any proposed material change in construction or restoration procedures and, except in an emergency, Union shall not make such change without prior approval of the OEB or its designated representative. In the event of an emergency, the OEB shall be informed immediately after the fact.
- 1.5 Within 15 months of the final in-service date, Union shall file with the Board Secretary a Post Construction Financial Report. The Report shall indicate the actual capital costs of the project and an explanation for any significant variances from the estimates filed in this proceeding.

2 Project and Communications Requirements

- 2.1 The OEB's designated representative for the purpose of these Conditions of Approval shall be the Manager, Natural Gas Applications.

- 2.2 Union shall designate a person as project engineer and shall provide the name of the individual to the OEB's designated representative. The project engineer will be responsible for the fulfillment of the Conditions of Approval on the construction site. Union shall provide a copy of the Order and Conditions of Approval to the project engineer, within seven days of the OEB's Order being issued.
- 2.3 Union shall give the OEB's designated representative and the Chair of the OPCC ten days written notice in advance of the commencement of the construction.
- 2.4 Union shall furnish the OEB's designated representative with all reasonable assistance for ascertaining whether the work is being or has been performed in accordance with the OEB's Order.
- 2.5 Union shall file with the OEB's designated representative notice of the date on which the installed pipelines were tested, within one month after the final test date.
- 2.6 Union shall furnish the OEB's designated representative with five copies of written confirmation of the completion of construction. A copy of the confirmation shall be provided to the Chair of the OPCC.

3 Monitoring and Reporting Requirements

- 3.1 Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the OEB. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all complaints that have been received to the interim and final monitoring reports. The log shall record the times of all complaints received, the substance of each complaint, the actions taken in response, and the reasons underlying such actions.
- 3.2 The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction

and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

- 3.3 The final monitoring report shall describe the condition of any rehabilitated land and the effectiveness of any mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

4 Other Approvals

- 4.1 Union shall obtain all other approvals, permits, licences, and certificates required to construct, operate and maintain the proposed project, and shall provide an affidavit that all such approvals, permits, licences, and certificates have been obtained.

Appendix C

Approval Affidavit

IN THE MATTER OF the Ontario Energy Board Act, 1998, S.O. 1998, c.15, Schedule B, and in particular, s.90 thereof;

AND IN THE MATTER OF an Application by Union Gas Limited for an Order granting leave to construct a natural gas pipeline and ancillary facilities in Tyendinaga Township in Hastings County and Sophiasburg Township in Prince Edward County.

:- AFFIDAVIT – CONDITIONS OF APPROVAL :-

I, Tom Grochmal, of the Municipality of Chatham-Kent, in the Province of Ontario, make oath and say as follows:

1. I am the Manager, Engineering Construction, an employee in the Head Office of Union Gas Limited, the Applicant in the matter referred to in the preamble to this my Affidavit and I have personal knowledge of the matters herein deposed to.
2. Pursuant to Condition 4.1 of the Ontario Energy Board's Decision and Order Dated March 19, 2015, EB-2014-0350, I confirm that all approvals, permits, licences and certificates required to construct, operate and maintain the proposed project were obtained.
3. I make this Affidavit in good faith and for no improper purpose.

SWORN BEFORE ME, at the)
Municipality of Chatham-Kent)
in the Province of Ontario,)
this 25th day of May, 2016.)



A Commissioner, etc.

Appendix D

Change Request

June 22, 2016

RESS

Ms. Pascale Duguay
Facilities Applications
Ontario Energy Board
2300 Yonge Street, Suite 2700
Toronto, Ontario
M4P 1E4

Dear Ms. Duguay:

**Re: Union Gas Limited ("Union")
Bay of Quinte Project
Board File # EB-2014-0350**

Please find attached Change Request No. 1 for the above-noted project.

Union believes that these changes are not significant and would appreciate your timely review and approval of these requests, as construction is in progress.

In the event that you have any questions or would like to discuss in more detail, please do not hesitate to contact me at 519-436-5457.

Sincerely,

W. T. (Bill) Wachsmuth, RPF
Senior Administrator, Regulatory Projects

cc: Zora Cmojacki, OEB
Colin Schuch, OEB

ONTARIO ENERGY BOARD

LEAVE TO CONSTRUCT CHANGE REQUEST

Project Name: Bay of Quinte Project
OEB File Number: EB-2014-0350
Change Request: #1

Description and Rationale for Change

In Union's pre-filed evidence Union committed to removing the existing pipeline which was attached to the Skyway Bridge after the new pipeline had been directionally drilled and commissioned under the Bay of Quinte. Due to construction delays the pipe was not removed in 2015. Ministry of Transportation Ontario ("MTO") has given Union a new move order which requires the abandoned pipeline to be removed by the end of 2017. A copy of the move order can be found at Schedule 1.

Construction and Restoration Practices

There are no changes to the construction and restoration practices identified in Union's pre-filed evidence only the timing has changed.

Environmental

No new environmental mitigation measures will be required.

Consultation

Union discussed this change with MTO and MTO issued a revised move order for the pipe to be removed by the end of 2017.

Lands

No additional land rights are required.

Costs

With the change in construction schedule the costs of removing the pipe from the bridge will increase by approximately \$471,000.

Schedule

Union will remove the pipeline from the Skyway Bridge in April 3rd-June 30th, 2017.

Maps

A map showing the location of the Bay of Quinte Project is attached at Schedule 2.

Ministry of Transportation

Corridor Management Section
1355 John Counter Boulevard
Postal Bag 4000
Kingston, Ontario K7L 5A3
Tel.: 613 544-2220 X 4126
Fax: 613-540-5106

Ministère des Transports

Section de gestion des couloirs routiers
1355, boulevard John Counter
CP/Service de sacs 4000
Kingston (Ontario) K7L 5A3
Tél.: 613 544-2220 X 4126
Télec. 613 540-5106



**MOVING OF UTILITIES
Financial Breakdown**

Region Eastern

INVOICE IN DUPLICATE MUST
SHOW THIS NUMBER

TO: Union Gas Limited
50 Keil Drive North
Chatham, ON
N7M 5M1

E-1608

Attention: Ahmed M. Al-Amry, Project Engineer, Engineering Construction

Project No. GWP# 4063-10-01
Location: **Highway 49 Skyway Bridge**

Highway No: **Hwy 49**

The Ministry acknowledges your proposal to make the following alterations to your plant; complete removal of abandoned pipe and its associated fixtures attached to the skyway bridge, which is in conflict with a proposed bridge rehabilitation project on the Ministry's property, subject to the conditions outlined herein.

- Removal must be carried out during daytime hours only (no night work permitted)
- No weekend work will be allowed, and no work will take place after noon on Fridays
- All work is to be completed before the long weekend in May, or after Labour Day in September, as MTO traffic office does not support lane restrictions during the summer.
- All work associated with this Move Order is to be completed by **December 31, 2017**

SUBJECT TO AUDIT BY THE MINISTRY'S AUDITORS, THE MINISTRY APPROVES PAYING ACCORDING TO:

GROUP: 2 CASE: **A** 100% of Cost will be borne by Union Gas

Upon completion of the work, please inform me with details to:

Ministry of Transportation
1355 John Counter Blvd
Kingston, ON
K7L 5A3

DATE: April 25, 2016

CORRIDOR MANAGEMENT, HEAD

Distribution:

Utility Company, Planning & Design, Operations Office, Corridor Policies Office

Ministry of Transportation

Corridor Management Section
1355 John Counter Boulevard
Postal Bag 4000
Kingston, Ontario K7L 5A3
Tel.: 613 544-2220 X 4126
Fax: 613-540-5106

Ministère des Transports

Section de gestion des couloirs routiers
1355, boulevard John Counter
CP/Service de sacs 4000
Kingston (Ontario) K7L 5A3
Tél.: 613 544-2220 X 4126
Télec. 613 540-5106



Relocation Notification and PSWH Act

The PUBLIC SERVICE WORKS ON HIGHWAYS ACT 1990 R.S.O Chapter P.49 and
Amendments thereto

Notice to Take-Up, Remove, or Change the Location of Appliances or Works

REGISTERED MAIL

Date: April 25, 2016
TO: Union Gas Limited
Dear: Ahmed M. Al-Amry, Project Engineer, Engineering Construction

Re: MOU E-1608 (Completely remove abandoned gas pipe and it's fixtures from the bridge)

Project No. GWP# **4063-10-01**
Location: **Highway 49 Skyway Bridge**

Highway No: **Hwy 49**

Pursuant to the above Act, you are hereby notified to take-up, remove, or change the location of your appliances or work on or before **December 31, 2017**.

If you fail to take-up, remove or change the location of your appliances or works by the above date, the Ministry shall claim compensation, according to the Act, for any loss or expense that it incurs as a result of your default.

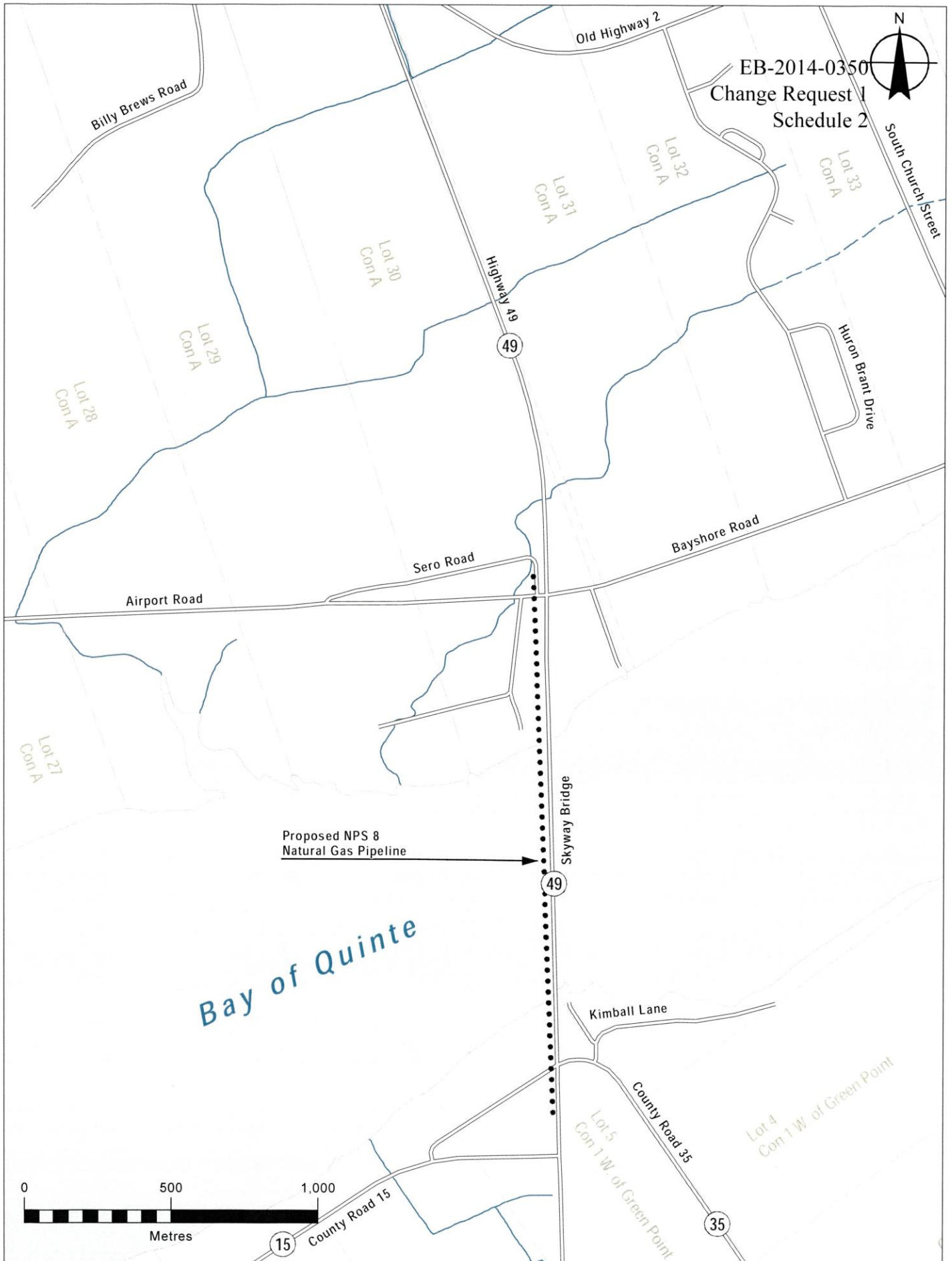
In order to avoid any misunderstanding in the future, the Ministry intends to strictly enforce the provisions of the above Act. If you fail to take up, remove or change the location of your appliances or works by the date specified in this notice that has been given to you, and the Ministry incurs a loss or expense by reason thereof, then the Ministry will claim due compensation from you.

Your co-operation is anticipated and appreciated.

Yours truly,

Louis Tay, P.Eng
Head of Corridor Management

EB-2014-0350
Change Request 1
Schedule 2



**Ontario Energy
Board**
P.O. Box 2319
27th Floor
2300 Yonge Street
Toronto ON M4P 1E4
Telephone: 416-481-1967
Facsimile: 416-440-7656
Toll free: 1-888-632-6273

**Commission de l'énergie
de l'Ontario**
C.P. 2319
27e étage
2300, rue Yonge
Toronto ON M4P 1E4
Téléphone: 416-481-1967
Télécopieur: 416-440-7656
Numéro sans frais: 1-888-632-6273



BY E-MAIL

July 15, 2016

Union Gas Limited
W.T. Wachsmuth
Senior Administrator, Regulatory Projects
50 Keil Drive North
P.O. Box 2001
Chatham ON N7M 5M1
bwachsmuth@uniongas.com

Dear Mr. Wachsmuth:

**Re: Bay of Quinte Replacement Project
Board File No. EB-2014-0350**

The Ontario Energy Board (OEB) is in receipt of your letter dated June 22, 2016 where Union Gas limited (Union) informed the OEB that due to construction delays, the removal of the existing pipeline that is attached to the Skyway Bridge has been deferred from 2015 to 2017. The Ministry of Transportation (MTO) has given Union a new move order which requires that the abandoned pipeline be removed by the end of 2017. The OEB requested additional information from you on June 24, 2016, which you then provided on June 28, 2016. Union clarified that the original estimate to remove the pipeline was \$230,000, and now the current estimate to remove the pipeline is \$471,000, which is an increase of \$241,000. Union noted the reasons for the increased costs are an additional mobilization and demobilization of the construction crew, inflationary costs arising from 2015 to 2017, and the enhanced traffic control plan requested by the MTO. Union noted that the additional costs to remove the pipeline in 2017 could go against the original contingency estimate.

As the Vice President, Applications, I have been delegated the authority of the OEB under section 6 of the *Ontario Energy Board Act, 1998* to determine whether Union's

proposals will result in material changes to the leave to construct granted by the OEB in the EB-2014-0350 proceeding. I have been further granted the authority to approve any changes that I have concluded are not material.

Union stated that it will remove the pipeline from the Skyway Bridge in April to June of 2017. Union has also noted that the costs of removing the pipeline from the bridge will increase by approximately \$241,000. I note that the actual costs of the project will be reported to the OEB in the Post-Construction Financial Report and will be reviewed in the next Union re-basing rate application.

Based on my review of the information provided, I find that the described change does not materially impact the leave granted by the OEB to construct the pipeline. I hereby approve the proposed change.

Yours truly,

Original signed by

Lynne Anderson
Vice President, Applications